# EPA Region 9 Strategic Plan Fiscal Years 2015-20176

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# Summary

The U.S. Environmental Protection Agency's Region 9 encompasses four states, 148 sovereign tribes and dozens of Pacific islands. It is a diverse, beautiful and productive part of the nation, from the lush rainforests of Hawaii and the agricultural oasis of the Central Valley to the thrumming economies of Silicon Valley, Las Vegas and Los Angeles. Nearly 50 million people make their homes and livelihoods throughout Region 9's 386,000 square mile-jurisdiction, producing more than \$2 trillion in goods and services each year.

Places throughout the Region – Arizona, California, Hawaii, Nevada, the Pacific islands and tribal lands – are encumbered with a host of environmental challenges. While much progress has been made over the last 40 years to reduce smog, improve water quality, clean up hazardous waste and create sustainable, healthy communities, much work remains to achieve the Agency's co-equal goals of protecting our environment and ensuring public health.

The Region 9 Strategic Plan outlines efforts that build on 40 years decades of progress while tackling emerging problems, such as climate change, marine debris, and the development of safe chemicals. Region 9 will strive to enforce federal standards governing clean air, clean water, toxics and hazardous waste, and develop and implement multidisciplinary approaches to specific geographic areas within the Region.

Among Region 9's highest priorities are the U.S. Mexico border, Navajo Nation, and the San Joaquin Valley in Central California. In both areas, predominantly minority and low-income populations grapple with some of the poorest air quality in the country, limited access to clean drinking water, and improper disposal of hazardous waste.

In the Pacific islands, Region 9 is addressing the growing impact of climate change, the increasing flow of marine debris, and efforts to clean up large-scale military installations.

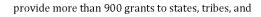
While we are addressing similar challenges in tribal lands, we are addressing other issues – namely, the legacy of highlytoxic uranium mining for weapons development in Navajo Nation, for which Region 9 has set clear, attainable benchmarks for cleaning up these sites and protecting the nation's critical natural resources for future generations.

Over the past  $\underline{45}$  years, Region 9 has spent billions of dollars and millions of staff hours to maintain and safeguard our most precious resources: the air we breathe, the water we

drink, the land we treasure.

## **EPA Region 9 Facts**

- Region 9 is home to 15% of the total population of the United States, and three of the fastestgrowing states in the nation.
- Our 148 tribes account for 25% of the total Native population of the United States, and 50% of all tribal lands nationwide.
- A full 61% of the lands in Region 9 are federally owned, and our partnerships with local, state, and other federal agencies are of primary importance to accomplishing our mission.
- Region 9 is host to 25% of the nation's dairies, employs 25% of the nation's agricultural workers, and produces 50% of the nation's produce. Other important industries include electronics and technology, forestry, mining, and tourism.
- Region 9 has more Superfund megasites than any other Region.
- We have the largest number of abandoned mines in the country; according to a GAO report.
   California alone has 47,000 abandoned hardrock mine sites.
- Region is home to important
  watersheds: the Klamath Basin,
  which drains 10.5 million acres in
  California and Oregon; Lake
  Tahoe, one of the deepest lakes in
  the world; and the San Francisco
  Bay-Delta Estuary, a 4-million
  acre watershed that covers more
  than 40% of California.
- 80% of Region 9's appropriated funds are used for grants; we



communities.

For more information about our work, please see our annual Region 9 Progress Reports at <a href="https://www.epa.gov/region9/annualreport">www.epa.gov/region9/annualreport</a>, which is now available in English and Spanish.

# Introduction

This EPA Region 9 Strategic Plan identifies the environmental and human health outcomes the public can expect, and describes how we intend to achieve those results. The Plan reflects a commitment to our core values of science, transparency, and the rule of law in managing our programs.

This document was developed by Region 9 to advance <u>EPA's goals</u> and its mission to protect human health and the environment. EPA's national <u>EV 2014-2018 Strategic Plan</u> sets forth five major goals plus four "cross-agency strategies" to guide EPA's work nationwide:

- Goal 1: Addressing Climate Change and Improving Air Quality
- · Goal 2: Protecting America's Waters
- Goal 3: Cleaning Up Communities and Advancing Sustainable Development
- Goal 4: Ensuring the Safety of Chemicals and Preventing Pollution
- Goal 5: Protecting Human Health and the Environment by Enforcing Laws and Assuring Compliance
- Strategy 1: Working Toward a Sustainable Future
- Strategy 2: Working to Make a Visible Difference in Communities
- Strategy 3: Launching a New Era of State, Tribal, Local, and International Partnerships
- Strategy 4: Embracing EPA as a High-Performing Organization

The Region 9 Strategic Plan takes these same goals and applies them to the environmental issues here in the Pacific Southwest. We then describe several strategies that focus on particular environmental issues, vulnerable populations or geographic areas within the Region that have especially severe impacts. For one of the strategies – *Working to Make a Visible Difference in Communities* – we have identified five communities in the Region where we will focus on coordinating technical assistance and other resources. Of course, this Plan cannot describe the thousands of actions that Region 9 will take over the course of the next two years. Rather, it provides guidance and direction for major areas of focus.

# What does EPA do?

EPA's mission is to protect human health and the environment. EPA is responsible for ensuring the implementation of many laws.

- Clean Air Act (CAA)
- Clean Water Act (CWA)
- Safe Drinking Water Act (SDWA)
- Federal Insecticide, Fungicide & Rodenticide Act (FIFRA)
- Emergency Planning & Community Right-to-Know Act (EPCRA)
- Oil Pollution Act (OPA)
- Resource Conservation & Recovery Act (RCRA)
- Toxic Substances Control Act (TSCA)
- Comprehensive Environmental Response, Compensation & Liability Act (CERCLA), commonly known as Superfund

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In some areas, EPA directly implements the law. Often it shares authority with another federal agency, or the program may be "delegated" or "authorized" for implementation by a state or tribe. In that case, EPA may conduct oversight and enforcement, in addition to providing financial support in the form of grants.

# Air Quality and Climate Change

Healthy air is essential to our day-to-day well-being and long term health. The Clean Air Act (CAA) is the federal law designed to make sure that all Americans have air that is safe to breathe. In the Pacific Southwest, we breathe cleaner air today than we did 40 years ago, despite population growth and the increased number of vehicles on the roads. Cleaner air has resulted in fewer illnesses, asthma attacks, hospitalizations and premature deaths. The direct benefits of the CAA are estimated to reach \$2 trillion in 2020 while preventing 230,000 premature deaths in that year alone.<sup>1</sup>

Despite tremendous progress in reducing air pollution, the Pacific Southwest continues to have some of the worst air quality in the nation with large populations exposed to particulate matter ( $PM_{2.5}$  and  $PM_{10}$ ) and smog (ozone). Breathing particulates can cause lung inflammation that can exacerbate diseases like asthma and chronic bronchitis, and can contribute to cardiovascular disease including heart attack and stroke. Ozone can cause irritation of the airways and lung inflammation, and can quickly worsen diseases like asthma and lead to hospitalization and even premature death.

Clean air is a national goal. To reach this goal, we work in close collaboration with tribes and 45 state and local air quality agencies, particularly in communities that continue to experience poor air quality, such as California's San Joaquin Valley, South Coast, and Imperial County. Over the next two years, wWe will continue utilizing our regulatory authorities and cultivating partnerships to improve air quality and address climate change.

# Region-Wide

Clean Power Plan: The 2015 Clean Power Plan is a historic and important step in reducing carbon pollution from fossil-fueled power plants. We will work with Arizona, California, and Nevada as they develop their initial state compliance plans due in September 2016. The plans may include infrastructure improvements, switching to cleaner fuels, increased use of renewable and zero emission energy production, and enhanced energy efficiency programs. We will also work closely with the Fort Mojave Indian Tribe and the Navajo Nation to reach a common understanding of the proposed federal plan and coordinate implementation of the Clean Power Plan in their areas. We will continue outreach to the public and industry regarding implementation of the plan, and will support future efforts to develop guidelines for affected units in Hawaii and Guam.

National Ambient Air Quality Standards Designations: EPA "designates" an area as attainment or nonattainment with the national ambient air quality standards (NAAQS) after receiving input from states and tribes and considering air quality monitoring information. If an area is designated as a nonattainment area, states develop and implement control plans (State Implementation Plans) to reduce air pollutant levels. We will be working with our state and local partners on two major designations.

<sup>&</sup>lt;sup>1</sup> Estimates are from a March 2011 report issued by EPA. http://www.epa.gov/oar/sect812/prospective2.html

- For the 2015 ozone NAAQS, we will work with states to evaluate air monitoring data used to support the states' recommendations on nonattainment areas, which are due to EPA in October 2016. We will then review the analyses and address any policy issues in order to complete the final designations of attainment and nonattainment areas by October 2017.
- $\circ$  For the 2010 sulfur dioxide (SO<sub>2</sub>) NAAQS, states will notify EPA of eligible sources of SO<sub>2</sub> by January 2016 and submit modeling or begin air monitoring by January 2017, which will form the basis for subsequent designations. We will be providing extensive technical modeling and monitoring support to states.

**Taking Action on State and Local Plans**: Region 9 reviews the largest number of SIP submittals in the country due to the numerous air agencies and significant air quality challenges within the Region. Region 9 often receives over 100 SIP submittals each year, including planning, control measure rules and permitting submittals, the majority of which require extensive analysis before EPA can take action. In an effort to manage this workload, we work with our states to establish priorities.

**Reducing Asthma by Improving Indoor Air Quality**: Asthma is one of the most chronic and costly health conditions in the U.S. Region 9 is pursuing multiple approaches to reduce the number and severity of asthma attacks by minimizing exposure to environmental asthma triggers (e.g., mold, smoke, dander, and pests) in homes, schools, and other facilities. Because asthma is especially prevalent in disadvantaged communities, we are supporting community-based efforts to train and educate healthcare workers, parents and caregivers. One goal is to identify long-term, sustainable financing for in-home asthma education programs.

We will fund the Imperial Valley Child Asthma Program, which serves low-income families in Imperial County, California, where childhood asthma hospitalizations rates are one of the highest in the state; work with the Environmental Finance Center West on a sustainable financing plan for local asthma service providers; and partner with the U.S. Department of Housing and Urban Development and the City of San Diego on a pilot "Pay for Success" strategy to sustainably finance the city's Healthy Homes Program.

Reducing Smoke from Residential Wood and Coal Heaters: Smoke from residential wood and coal heaters contains fine particulate matter ( $PM_{2.5}$ ) and other pollutants, including carbon monoxide, volatile organic compounds, black carbon, and benzene. Residential wood and coal smoke can increase particle pollution to levels that pose serious health concerns. The fine particulate pollution can get deep into the lungs, harming the lung tissue, blood vessels and the heart. Newer, EPA-certified wood stoves, coupled with education about proper burning techniques, can significantly reduce the pollution created by residential wood heaters. We will help communities reduce exposures to the harmful pollutants in wood and coal smoke by:

- Coordinating with other federal, state, tribal and local agencies to support wood stove changeouts, especially in Portola and the San Joaquin Valley in California and the Navajo Nation;
- Offering training on the Navajo Nation to contractors on replacing older, more polluting stoves with cleaner, more efficient stoves;
- Developing environmental education materials for middle and high school students, and utilizing "citizen science" tools such as low-cost portable air monitors for investigating and measuring air pollutants.

Reducing Pollution Near Major Roadways: Proximity to roadways has been linked to health problems,

including childhood asthma and increased risks of lung and heart disease. There are nearly 17,000 schools across the U.S. located near heavily travelled roads. In the next year, we will provide technical expertise to help communities reduce exposures to near-road air pollution by:

- Disseminating a new handbook, "Best Practices for Reducing Near-Road Air Pollution Exposure at Schools" Helping schools identify best practices to reduce exposure;
- With EPA's Office of Research and Development (ORD) and Region 5, examining the effectiveness of vegetative barriers in reducing exposures;
- Partnering with EPA's ORD on a pilot project involving the use of Aclima's mobile sensing technology on Google "Street View" cars to collect air pollutant data near roadways in the San Francisco Bay Area.

**Reducing Diesel Emissions through Funding and Assistance**: Through the West Coast Collaborative, a public-private partnership to reduce diesel emissions, we will provide outreach and assistance on funding opportunities, technology advancements, and policy developments. We will award and manage grant funding under the Diesel Emissions Reduction Act (DERA), and support rebates and other diesel, black carbon and greenhouse gas emission reduction activities that lead to the utilization of cleaner fuels and engines, and more efficient systems.

**Expanding Renewable Energy**: We will promote renewable energy development by supporting large, aggregated purchases of solar electricity generated at federal properties. We will foster development of solar electricity purchases that support charging of medium and heavy duty electric vehicles by providing technical and procurement support to potential commercial and industrial customers. We will participate in state and federal efforts to expand the development of dairy digesters and other biogas sources for energy and fuel use.

**Studying Ozone Transport**: Areas in the western U.S. have raised concern about the feasibility of attaining a lower ozone standard due, in part, to transported ozone and precursors throughout the western states and from Asia. The mechanisms for ozone transport from Asian sources are complex however. The impact that ozone transport has on an area's compliance with the ozone standard remains an outstanding technical and policy issue. The California Air Resources Board is planning in summer 2017 a study to better understand ozone transport from the Pacific. Region 9 intends to be engaged in this work and support it where resources allow. We will also work with Nevada and the Western State Air Directors (WESTAR) as they further evaluate transport throughout the western U.S., especially in rural areas.

## Arizona

EPA's Regional Haze program strives to improve visibility and air quality in the nation's wilderness areas and national parks. We will work with the state of Arizona to reconsider various aspects of the regional haze requirements for emission controls at several power plants and cement facilities that were included in the Regional Haze Federal Implementation Plans (FIP). Our goal is to work with the state, utilities and facilities to ensure that adequate controls are in place to meet Regional Haze requirements, protect public health and improve visibility.

#### California

California's San Joaquin Valley and South Coast Air Quality: Due to a combination of air pollution sources, topography and meteorology, the San Joaquin Valley (SJV) and the Los Angeles (South Coast) areas

have some of the greatest air quality challenges in the nation, experiencing elevated levels of ground level ozone and particulate matter. To address these elevated levels, we will review and take action on several SIPs designed to bring the areas into attainment of the national air standards. For SJV, we will take action on plans to attain the 1997 and 2006 fine particulate matter ( $PM_{2.5}$ ) standards and the 1-hour ozone standard. For the South Coast, we will take action on a plan to attain the 2006  $PM_{2.5}$  standard. We will work with the state, the San Joaquin Valley Air Pollution Control District and the South Coast Air Quality Management District, as they develop plans to attain the 2008 ozone standard and the  $PM_{2.5}$  standards, and a plan for maintaining attainment of the  $PM_{10}$  standard in SJV. We will support the development and deployment of new, cleaner technologies for these areas, provide credit for incentive programs when possible, and support the state's scientific efforts to better understand the ground level impacts of ozone transport from Asia.

Clean Air Technology Initiative: The Clean Air Technology Initiative (CATI) is a collaborative effort involving EPA, the California Air Resources Board, the California Energy Commission, the San Joaquin Valley Air Pollution Control District and the South Coast Air Quality Management District. CATI will support efforts to accelerate the demonstration and deployment of cleaner technologies for mobile sources in the San Joaquin Valley and South Coast, which is critical for these two areas to attain the ozone and PM2.5 national air standards. CATI's current focus is to facilitate development and deployment of zero and near-zero emission technologies for heavy-duty trucks that move goods from the ports and produce from the SJV, to the rest of the country. Projects have included supporting new technologies for zero emission buses, fuel cell locomotives, electric agricultural equipment and battery-electric delivery vehicles. We will also develop collaborative projects with other federal agencies, such as the Federal Rail Administration, Department of Energy, Natural Resources Conservation Services and the Federal Highways Administration.

## Nevada

We are strategically implementing the CAA in Nevada to ensure protection of public health and the environment. Specifically, we will conduct technical evaluations of the monitoring networks in Clark and Washoe Counties and the Nevada Division of Environmental Protection's (NDEP) monitoring network. With Clark County, we are also working on its Ozone Advance Program to achieve early reductions with the lower ozone standard. In addition, we are reviewing NDEP's operating permits for mercury releases at gold mines.

## Hawaii

See the Hawaii section under Geographic Areas of Focus [add link]

# Water Quality

Water touches every person every day; it is the lifeblood of our communities and our livelihoods. In the arid Pacific Southwest that has been impacted by a multi-year drought, water is an especially valuable resource that faces many competing demands and challenges. From the headwaters of our watersheds to the depths of our drinking water aquifers, Region 9 is committed to protecting our precious water resources.

Consistent with the national water program, Region 9's water quality strategy has two organizing themes: healthy watersheds and sustainable communities. Under healthy watersheds, our focus is on restoring impaired waters in priority watersheds and protecting wetlands. Under sustainable communities, our priorities are on developing sustainable infrastructure to protect public health and conserve resources

for the benefit of future generations.

For each of these two themes, Region 9's approach to protect water quality and all of water's beneficial uses is two-fold:

- 1. Use the Clean Water Act (CWA) and the Safe Drinking Water Act (SDWA) as regulatory tools to develop effective permits and enforce compliance; and
- 2. Coordinate and leverage resources by providing financial and technical assistance towards specific goals that restore water quality.

## Achieving Healthy Watersheds

Clean water is essential for human health, recreation, economic productivity, and the survival of our cherished aquatic ecosystems. However, many of our streams, rivers, lakes, and much of our coastline have poor water quality. For these waters, EPA, states, and tribes conduct extensive studies to calculate the maximum amount of a pollutant that a waterbody can receive and still safely meet water quality standards, known as a Total Maximum Daily Load (TMDL), which is used as a guide for federal, state, and local decisions to restore and protect water quality. In FY15 and FY16, we will support our partners in establishing numeric nutrient standards and developing and implementing nutrient TMDLs; nutrients are a leading cause of algal blooms and cyanobacteria in drinking water sources and surface waters. In California, we will approve in FY16 the State's water quality standards for trash under the "Trash Control Policy," the country's first statewide effort to eliminate trash from lakes, streams and shores. To support water quality programs throughout the Region, we will award approximately \$700 million in new grant funds in FY15 and FY16. In FY15, we approved 5 year Nonpoint Source Management Plans for Region 9 states.

## San Francisco Bay and Delta

The largest and one of the most ecologically diverse aquatic habitats on the West Coast, the San Francisco Bay and Delta provides drinking water to 25 million Californians and irrigation water to 4 million acres of farmland. The estuary's poor water quality, however, reflects the cumulative and interactive effects of pollution, water diversions, habitat degradation and non-native species. Region 9 is working with the California Water Boards and federal agencies to restore and protect the San Francisco Bay and Delta by:

- Working with the State Water Resources Control Board on its comprehensive update of the Bay Delta Water Quality Control Plan.
- Providing Bureau of Reclamation, California Department of Water Resources, Army Corps of Engineers, and others with constructive technical comments on the "CA WaterFix" / Bay Delta Conservation Plan under NEPA and CWA 404.
- Promoting the inclusion of trash reduction and low impact development requirements in the new San Francisco Bay Regional MS4 permit.
- Providing almost \$9 million through the San Francisco Bay grant program to foster widespread use
  of green infrastructure, restore wetlands, and improve water quality.
- Accelerating Bay shoreline adaptation to sea level rise by promoting new beneficial reuse site for dredged sediment and helping the regulatory community evolve our Bay "fill" policies.
- Delineating areas covered by the CWA at the Redwood City "Saltworks" site by the end of the second quarter of FY16.

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 Conduct in FY15 a technical review of selenium criteria for the San Francisco Bay and propose criteria in FY16.

#### Lake Tahoe

Because of its ecological significance, natural beauty and recreational value, Lake Tahoe is designated an "Outstanding National Resource Water" by the State of California and a "water of extraordinary ecological or aesthetic value" by the State of Nevada. However, Lake Tahoe continues to be threatened by the impacts of land use, transportation, invasive species, and wildfires. Since 1997, EPA has provided nearly \$47 million to Lake Tahoe for projects to control polluted runoff; conduct wetlands planning; develop watershed improvement and management tools; and initiate urban storm water pollution prevention.

In 2011, California, Nevada, and the EPA signed a Lake Tahoe TMDL to return water clarity to historic levels. Region 9 is working to implement the bi-state Lake Tahoe TMDL for fine sediment and nitrogen by directing financial and technical resources to priority studies, outreach and education, and pollution-reduction projects. We will provide technical expertise in watershed planning and TMDL implementation to increase lake clarity to 71 feet by 2016.

#### Klamath River

Extending 250 miles from Southern Oregon to the California coast, the river was historically the third-largest producer of salmon on the West Coast, and supports Chinook and Coho salmon, cutthroat trout, steelhead and sturgeon. Several tribes rely on the river for subsistence, transportation and ceremony, as they have for thousands of years. Klamath River waters are degraded due to excessively warm water temperatures, high nutrient loads and low dissolved oxygen, and unnatural flow patterns associated with water impoundments from dams and, agricultural diversions; these conditions have contributed to harmful to cyanobacterial, and algae blooms that have contributed to and fish die-offs.

In 2002, a massive die-off of more than 33,000 salmon brought national attention to this historically conflicted area, where tribes, farmers, commercial salmon fisherpeople, wildlife refuges and hydroelectric power generation have competing needs for water. In an effort to resolve conflicts and restore the salmon fishery, two linked agreements - the Klamath Hydroelectric Settlement Agreement (KHSA) and the Klamath Basin Restoration Agreement (KBRA) - proposed an alternative to FERC relicensing of the dams by the removal of four dams, reallocation of water, and funding to advance restoration of salmonid fisheries for salmon-recovery-work, as an alternative to FERC relicensing the dams. The Klamath Facilities Removal-EIS/EIR (Final 2013) identified as preferred alternatives the removal of four dams on the river and implementation of KBRA to advance restoration of salmonid fisheries and protect the public interest-Gongressional action, however, is needed to implement the The Klamath Facilities Removal EIS/EIR (Final 2013) identified as preferred alternatives the removal of four Klamath River dams and implementation of the KBRA restoration actions. The Klamath Basin agreements are stalled due to lack of Congressional action needed to implement them. Approaches for advancing watershed restorations continue to evolve, and FERC relicensing processes for Klamath River dams in California are proceeding. Despite Region 9 will continue to's limited resources, we will support restoration of the Klamath watershed in the following ways, given available resources:

- Participate in review of major water projects (e.g., CEQA EIR and 401 Water Quality Certification for FERC relicensing), and collaborate on large scale pollutant control programs, to ensure progress towards water quality standards and Klamath Basin restoration goals.
- Work with state and federal partners to ensure responsible parties develop and initiate water quality restoration plans and track water quality improvement projects.
- Collaborate on large scale pollutant control programs and major water projects to ensure they support water quality standards and Klamath Basin restoration goals.

- Provide resources to support implementation of the Klamath Basin TMDLs and assessment of <u>cyanotoxins cyanobacteria</u> to protect public health.
- Support tribal efforts to restore the Klamath River watershed and estuary.

# **Protecting Wetlands**

Next to tropical rain forests, wetlands are the most diverse and productive ecosystems on the planet. In addition to providing habitat for vanishing species, wetlands protect human health and safety through their natural water quality and flood control functions. As losses of western wetlands and streams exceed 90% in many places, our focus includes "big picture" approaches to protecting and restoring aquatic resources.

- Provide approximately \$1.8 million annually to states and tribes to develop wetland monitoring, restoration and regulatory programs.
- Support promulgation of the Final "Clean Water Rule" in FY15, increasing clarity over which
  wetlands are covered by the CWA and which are not
- Provide guidance to minimize the impacts of the most significant projects that require wetland fill, such as SF Bay and Delta restoration and water supply projects, CA High Speed Rail, utility-scale renewable energy, mining, and various threats to our oceans and coral reefs.
- Help Sacramento and Placer Counties complete efforts in 2016 to combine species and aquatic resource permitting under a regional conservation strategy.
- Provide technical assistance to our states to monitor and assess the health of approximately 60
  wetland sites in California, Nevada, and Arizona as part of the 2016 National Wetlands Condition
  Assessment.
- Enforce CWA protections for wetlands through administrative and judicial actions.

## Developing Sustainable Water Infrastructure

Our homes, industries, and communities depend on the sustainability of our infrastructure. Region 9 is working to support sustainable communities by focusing on infrastructure: coordinating and leveraging resources in priority areas, addressing the needs of community drinking water systems, and protecting drinking water aquifers from underground injection.

## Resource Coordination

As much of the Region enters into another year of drought, supporting sustainable infrastructure becomes ever more essential to ensuring the conservation of our resources. Mostly built before 1980, the water infrastructure in the U.S. is not as efficient as current technologies. Aging infrastructure suffers from major leaks, and operation and maintenance costs are increasing as energy costs rise. A 2010 study from the California Public Utilities Commission (CPUC) estimated that over 280 billion gallons are lost each year through California's water distribution system.

Region 9 administers about \$240 million in State Revolving Funds (SRF) annually to renew and repair drinking water and wastewater infrastructure. Our goal over the next two years is to continue coordinating and leveraging federal and state water infrastructure funding to promote sustainability, reduce GHG emissions, and save money by increasing water and energy efficiency, renewable energy development, and low-impact development.

Work with state SRF Programs, particularly California and Hawaii, to improve the management of

the Drinking Water and Clean Water SRF programs to ensure funds are used for needed infrastructure projects in a timely manner. Encourage and assist state SRF Programs to fund energy and water efficiency, renewable energy, recycled water, and green infrastructure/low impact development projects.

- In FY15 and FY16, wWork with municipalities to promote water conservation and efficiency, reuse
  of treated wastewater, stormwater and urban runoff capture, and graywater for non-potable uses.
  Establish a working partnership with ReNuit to promote and foster stormwater and wastewater
  reuse.
- Work with states, tribes, municipalities, and NGOs to help prepare communities for future droughts and the adverse impacts of climate change.
  - In FY15 and FY16, continue implementing Finalize and implement Region 9's Drought Response and Preparedness Strategy with an increased focus on building resiliency.
  - In FY15 and FY16, cCollaborate with stakeholders to offer training for utilities to identify
    and address losses in their water distribution systems; leverage SRF investments to
    upgrade drinking water and wastewater infrastructure; and maximize water conservation
    and recycling.
  - In FY15 and FY16, sSupport sustainable infrastructure projects to help small communities and tribes adapt to climate change-induced risks.

#### Community Drinking Water Systems

While community water systems continue to deliver safe drinking water in compliance with the SDWA to 97% of the population in Region 9, ensuring a safe, reliable and sustainable source of drinking water is fraught with ongoing challenges. Maintaining compliance with federal and state drinking water requirements coupled with increasing operation and maintenance costs associated with aging infrastructure poses the greatest challenge. Smaller water systems, such as those serving less than 10,000 persons, are greatly hindered by dis-economies of scale and lack of technical, managerial and financial capabilities to address needs. Region 9 is addressing the needs of community drinking water systems in the following ways:

- Engage with stakeholders in California and Arizona, and fund workshops and technical assistance
  to improve access to safe drinking water in small disadvantaged communities throughout the
  Region.
- Support California's Safe Drinking Water Plan leading to the establishment of new state authority to mandate drinking water system consolidation or extension of service as a means of ensuring safe, reliable and affordable drinking water in disadvantaged communities.
- In FY16, partner with Arizona regulatory agencies to develop a compliance strategy to improve access to safe drinking water in small disadvantaged communities.
- Improve data reliability and accuracy among our delegated drinking water programs through audits and reviews.

## Underground Injection Control

The SDWA mandates our Underground Injection Control (UIC) Program to protect drinking water aquifers from adverse impacts caused by injection wells, including deep industrial disposal wells, wells used for enhanced oil and gas recovery, solution mining wells, and shallow wells such as those used for stormwater drainage or as part of a community septic system. EPA issues permits to ensure that deep injection projects comply with safe drinking water requirements and encourages adoption of ground water

protection Best Management Practices. Region 9 is protecting drinking water aquifers from underground injections in the following ways:

- In 2016, <u>document ensure</u> improvements in SDWA compliance from state implementation and EPA oversight of the California Division of Oil Gas and Geothermal Resources' Class II oil and gas UIC permitting program.
- Evaluate new deep injection proposals and permit renewal applications for EPA-issued Class I, III and V permits.
- Continue to compel closure of banned Large Capacity Cesspools (LCC) in Hawaii.
- Evaluate permit applications for geologic sequestration injection wells to ensure siting, construction, operation, monitoring, closure, and post-injection site care requirements are compliant with EPA's geologic sequestration SDWA rules to protect drinking water aquifers.

# Cleaning Up Communities and Advancing Sustainable Communities

EPA's primary tools for cleaning up our communities are CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act), commonly known as Superfund, along with RCRA (Resource Conservation and Recovery Act), TSCA (Toxic Substances Control Act), OPA (Oil Pollution Act), and EPCRA (Emergency Planning and Community Right-to-Know Act). EPA's mandate includes eliminating exposures to uncontrolled hazardous waste, enforcing laws on waste management, and preventing waste from being generated in the first place. We work with facilities that have been permitted or sites that have been listed on Superfund's National Priorities List (NPL), and we respond to smaller dangerous sites discovered throughout the year. Region 9's efforts are summarized below.

## Superfund Program

EPA's Superfund program cleans up the most seriously contaminated sites in the country. Region 9 has a predominance of large, complex sites that include many square miles of contaminated ground water, former commercial landfills, operating and closed military installations, and many historic mines. We address the most toxic and high risk areas first to protect nearby residents and sensitive ecosystems. We currently have 132 sites on the National Priorities List in the Pacific Southwest in various stages of progress in their cleanup.

- Protect people and the environment from potential exposures to hazardous and toxic waste at contaminated properties.
  - Complete or oversee 20 emergency or time-critical cleanup actions in FY15, and 20 more in FY16.
    - Complete the removal of hazardous waste at the Samoa Pulp Mill in California.
    - Work with the Nevada Department of Environmental Protection to evaluate options for addressing lead and arsenic contamination from historic lead smelting activity in Eureka, Nevada.
    - Evaluate a number of abandoned shipwrecks in Apra Harbor, Guam.
  - Support adding the Anaconda Mine in Yerington, Nevada, to the NPL.

- At larger, more complex NPL sites, complete remedial actions that will significantly reduce the risk of exposure to nearby residents and the environment.
- Pump, treat, and distribute to drinking water systems more than 115 million gallons of
  water per day in California. In FY15-16, place three more systems into operation in
  Southern California; two of these systems will provide drinking water, while a third will be
  re-injected into the aquifer to support restoration and provide for potential future use.
  Provide drinking water to more than 130,000 residents in Arizona as part of ongoing
  cleanups at the Motorola 52nd Street and Tucson International Airport Superfund sites, and
  use treated water for irrigation or discharge into surface waters at other sites, which would
  be available to downstream users.
- Conduct vapor intrusion investigations and initial response actions at over a dozen NPL sites in California.
- Complete cleanups at areas on 20 federal facility NPL sites.
- $\underline{\circ}$  . Complete the final privatization cleanup agreement at the former McClellan AFB near Sacramento.
- Finalize and ensure implementation of an agreement to clean-up contaminated groundwater at the Cooper Drum Superfund Site in South Gate, Los Angeles County.
- Complete construction of the remedy at the Rio Tinto Mine Site in Nevada, thus helping to restore the habitat of the red-band trout.
- Protect people and the environment from accidental or intentional releases of oil or hazardous materials.
  - o Provide on-scene response support and clean up contaminated sites.
  - Prevent spills through compliance inspections and enhance preparedness through unannounced drills on critical inland waterways.
  - Prepare for disasters through response planning and preparedness such as Incident Management Team/Response Support Corps readiness, oil spill response coordination and crude by rail.
- Reduce environmental footprint of EPA-led cleanups and promote sustainable re-use of contaminated properties.
  - Evaluate new cleanup technologies and techniques that have a smaller environmental footprint.
  - Support renewable energy use for cleanup activities. For EPA-led cleanups, purchase renewable energy certificates to off-set energy needs.
  - Promote the RE-Powering America's Lands project for constructing utility scale renewable energy projects on contaminated lands.
- Understand and address the impacts of solid waste accumulating in the marine environment.
  - <u>Continue partnering with USFWS/DOI and stakeholders</u> to investigate and begin mitigation of contaminant releases from Tern Island in <u>the Northwestern</u> Hawaiian Islands on the surrounding ecosystem, including <u>assessing</u> the role of microplastics as a contaminant transport mechanism.
  - Work with Hawaii to ensure the trash reduction plan required by the National Pollutant
     Discharge Elimination System (NPDES) storm water permit is developed and implemented.

- Work the U.S. Navy Guam and Guam Power Authority Department of Public Works to support and review MS4 Permit Applications, including using trash reduction provisions to improve stormwater controls, reduce marine debris, and better protect coastal waters and coral reefs.
- Support building out Guam's Marine Debris Action Plan and assist with designing and launching American Samoa's Marine Debris Action Plan focused on source reduction initiatives designed to reduce or eliminate products and practices that lead to marine debris.
- Assess through research projects conducted in collaboration with UC Davis, MBARI, and others the toxicological threats posed by microplastic particles on the ecosystem and the food chain
- Support sustainable development through assessment, cleanup and revitalization of brownfields and contaminated lands, and green jobs training.
  - Manage Area Wide Planning Grants to promote community participation in redevelopment planning in neighborhoods surrounding brownfield sites.
  - Continue engaging nearly 450 communities to identify, assess, clean up, and plan for redevelopment of potentially contaminated properties.
  - Transfer significant portions of land to support redevelopment at NPL/BRAC sites in California, including Hunters Point, Alameda, Concord, and Riverbank.
  - Train 180 disadvantaged adults in environmental technology and cleanup of their communities through EPA's two job training programs.
- Increase access and resources for underserved communities to be more involved in decisions about hazardous waste sites that impact them. Use Technical Assistance Services for Communities (TASC) to provide independent scientific advisors.

## Promoting Sustainable Materials Management

Sustainable materials management reduces environmental impacts across the life cycle of materials, including mining, manufacturing, use, reuse, recycle, and final disposal. We are working nationally and within Region 9 to gain efficiencies in sustainable materials management that result in greenhouse gas reductions, conservation in materials and water, and reductions in waste and toxicity.

- Promote sustainable food management by recruiting and retaining over 100 Food Recovery Challenge participants who will track and report food waste reductions.
- Partner with federal agencies in the national Federal Green Challenge, which aims to reduce GHG from federal facilities by 5% or more each year in two of six areas: electronics, energy, purchasing, transportation, waste, and water.
- Make available resources developed by the West Coast Climate and Materials Management Forum, an EPA-led partnership of West Coast cities and states, including a climate friendly purchasing toolkit for state and local governments, universities, and other institutions.

## **Ensuring Safe Waste Management**

As we strive to minimize toxicity and eliminate waste, strong and vigilant oversight of the remaining

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waste that is generated is important to preventing harm to communities and the environment. Forty-five-Fifty years ago, contamination from mismanagement and spills was common. Today, we are controlling hazardous waste from "cradle-to-grave" under RCRA, issuing and enforcing permits, and overseeing cleanups. RCRA also sets forth a framework for municipal solid waste management and enables EPA, states and tribes to address environmental problems that can result from underground tanks that store petroleum and other hazardous substances. While waste management has improved markedly, there is still much to be done.

- Protect people and the environment from potential exposures to hazardous and toxic waste at contaminated properties.
  - Partner with states and tribes to complete cleanup of approximately 1,600 over 1400 leaking underground storage tanks during FY20156 and FY20167.
  - Partner with states and tribes to <u>selectionstruct</u> final cleanup remedies at 25 RCRA hazardous waste sites by the end of 2016, toward the goal of final remedy construction at 95% of over 300 high-priority sites in Region 9 by 2020.
  - Reduce the time to approve PCB cleanup applications by 20% by 2016, based upon "lean" process improvements.
  - At the Tronox perchlorate facility in Henderson, Nevada, protect the Colorado River from contamination by optimizing the effectiveness of groundwater extraction and treatment to further improve perchlorate treatment by 25-30% by the end of 2016.
  - Partner with HDOH to establish and ensure implementation of anthe enforceable agreement with the Navy to clean-up past releases and reduce the threat of future releases at the Red Hill underground storage tank facility.
- Protect communities and workers from exposures at hazardous waste and PCB facilities subject to
  EPA or state permits by establishing specific requirements that must be followed when managing
  those wastes. With our state partners, we will review and act on renewals of existing permits and
  new facility permit applications. We will focus on site-specific technical issues as needed including
  groundwater, air monitoring, and waste management.

## HUD/DOT/EPA Partnership for Sustainable Communities

The Housing and Urban Development/Department of Transportation/EPA Partnership for Sustainable Communities was launched by the three federal agencies to help communities develop in more environmentally and economically sustainable ways. With our partners, we will build capacity in communities and advance the consideration of equity in land-use and transportation planning.

- Provide technical assistance to communities that received HUD and DOT planning grants funding to
  minimize impacts associated with transportation and land use.
- Build smart growth capacity in communities by providing tools and resources that help achieve the
  desired development goals, improve the quality of life for residents, and make their communities
  more economically and environmentally sustainable.

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 Encourage equity considerations and involvement of community groups in federally-funded planning activities by facilitating access and information sharing.

## Reducing Environmental Impacts through Environmental Review

Commented [CC3]: Note: Red Hill is duplicated on pg 16 and pg 24 (with track changes on) Pursuant to the National Environmental Policy Act (NEPA), EPA will promote environmentally responsible federal decisions by commenting on Environmental Impact Statements prepared by other federal agencies, engage in early coordination on federal projects where significant opportunities exist to avoid or minimize adverse impacts to public health or the environment, minimize greenhouse gas emissions, or improve resiliency to climate change.

- Reduce impacts from major federal transportation projects. Work with California High Speed Rail
  Authority and partners to implement the High Speed Rail Sustainability MOU, which outlines
  measures to minimize the environmental impacts of the future rail system, improve the livability of
  communities near planned stations, and promote renewable energy options.
- Minimize the adverse environmental impacts of proposed energy, major infrastructure, and water projects, such as the "CA WaterFix" / Bay Delta Conservation Plan.
- Minimize risks of surface water, ground water, and long-term land contamination from proposed
  mining projects. Proactively encourage appropriate mine design and financial assurance, in order to
  prevent avoidable degradation of water and land, and to ensure availability of adequate resources
  for remediation, where needed.

# Chemical Safety and Pollution Prevention

Materials and products in our everyday lives, from the homes we live in to the food we eat, contain chemicals that can impact the environment. Children are especially vulnerable to environmental contaminants as their respiratory, neurological, immunological, and reproductive systems undergo rapid changes, from conception through adolescence. Our goal is to reduce or eliminate lifecycle impacts of materials and products during their processing, manufacture, use, and disposal. EPA's primary tools for ensuring chemical safety are the Toxic Substances Control Act, the Federal Insecticide, Fungicide and Rodenticide Act, and the Pollution Prevention Act. Region 9's efforts are summarized below.

- Protect families from lead poisoning, the greatest direct environmental threat to children, affecting over one million children nationwide each year.
  - Develop the capacity of local governments and tribes to train residents on lead hazards, conduct blood lead screenings, and provide treatment information for lead-poisoned children.
  - Partner with 10 local governments to adopt Lead Renovation, Repair, and Painting requirements that ensure renovation jobs use lead-safe work practices, and work with Contractors State Licensing Boards to educate registered contractors who may be affected by the Lead Renovation, Repair and Painting Rule.
- Work with local and tribal partners to reduce environmental exposures of children at schools and daycare centers.
  - Implement EPA's Voluntary School Siting Guidelines and State School Environmental Health Guidelines.
  - Develop and disseminate in 2016 guidance to assist California schools in implementing best management practices to reduce the potential for PCB exposures.
- Protect against pesticide exposure by conducting inspections, compliance outreach, state and tribal oversight, and appropriate enforcement actions.

- Work with states and tribes to ensure pesticides are legally registered with EPA and ensure pesticide products do not make illegal public health claims.
- Protect Region S's farmworkers and their families from pesticide exposure through targeted training. Conduct targeted Train-the-Trainer workshops through partnerships with local and state agencies for promotores who serve farmworkers and their families. The four-hour workshops highlight the importance of preventing pesticide exposure at home and in the workplace, with a focus on the safety provisions under the Worker Protection Standard. The workshops include hands-on activities, and participants are provided with teaching materials to carry the pesticide safety message to their communities.
- Implement a comprehensive outreach plan on new agricultural Worker Protection
   Standards for states, tribes, farmworker and other community organizations, and industry
   groups upon request. These national standards are intended to prevent adverse effects
   from pesticide exposure among agricultural workers and include increased training, field
   posting notification of pesticide applications, and new standards for protective equipment.
- Support the goals of the White House "National Strategy to Promote the Health of Honey Bees and
  Other Pollinators" by working with states and tribes to develop <u>voluntary pollinator protection</u>
  plansManaged Pollinator Protection Plans.
- Ensure the integrity and public availability of chemical release information through the Toxic Release Inventory (TRI) by conducting inspections, compliance outreach, data analysis, and appropriate enforcement actions.
- Deploy pollution prevention strategies to reduce or eliminate the lifecycle impacts of products.
  - Serve on the Underwriters Laboratories Environment (ULE) Technical Panel to develop a green standard for cell phones to reduce energy use and toxics and promote product stewardship. The standard will be completed in spring 2016.
  - Represent EPA on the National Electronic Product Environmental Assessment Tool (EPEAT) Standards for Computers Workgroup. Lead subgroup on material selection and packaging.
  - Promote products <u>by raising the visibility of that earn</u> the Safer Choice label <u>through</u>
     <u>partnerships</u> with <u>regional</u> <u>by recruiting</u> retailers to make these products more visible to
     <u>educate</u> consumers, and <u>through outreach to</u> institutions to specify and purchase Safer
     Choice products.

# Enforcing Environmental Laws

The protection of public health and the environment requires enforcement of environmental laws and compliance assurance. Region 9's attorneys, scientists and engineers work together to ensure safe drinking water, clean water, and clean air. Region 9 also works closely with state and tribal agencies to coordinate inspection and enforcement activities and develop actions that address non-compliance. In FY14, Region 9 conducted more than 800 inspections and initiated 75 enforcement actions.

#### National Initiatives

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EPA's national enforcement initiatives are selected based on widespread non-compliance or significant impacts to human health and the environment. The national initiatives run in three-year cycles with the current cycle concluding in FY16. Region 9 will focus many of its enforcement resources on the following issues

- Raw sewage and contaminated stormwater: Many of our largest cities are under court-approved
  consent decrees to implement major infrastructure improvements. Region 9 will work with
  municipal systems to ensure compliance, and inspect wastewater collection systems not yet
  evaluated. The Region will also continue targeted enforcement actions to ensure municipalities and
  industry are reducing or eliminating stormwater runoff.
- Animal waste: Concentrated animal feeding operations can have a significant impact on water
  quality. Region 9 is working closely with the California Water Boards to ensure that these facilities,
  and in particular the many dairies in the region, have adequate permits and are in compliance with
  federal and state requirements.
- **Toxic air pollution:** The CAA and EPA's regulations impose strict emission control requirements for all 187 <u>hazardous air pollutants</u> that pose significant threats to human health. Region 9 will focus on addressing excess emissions of these pollutants.
- Widespread air pollution from large sources: The CAA requires certain large industrial facilities
  to install state-of-the-art air pollution controls when they build new facilities or make "significant
  modifications" to existing facilities. Region 9 will work with our states to investigate and take
  enforcement action against non-compliers in the coal-fired utility sector, as well as the
  manufacturers of cement, glass and acid.
- **Minerals processing:** Mining and minerals processing facilities generate more toxic and hazardous waste than any other industrial sector, based on data compiled in EPA's TRI. Region 9 will continue to address noncompliance in the mining sector, particularly at copper and gold mines.
- **Energy extraction:** Energy extraction activities can pose a risk to air, surface and groundwater. Region 9 will continue to address non-compliance in this sector which contributes to environmental degradation.

## Regional Priorities

- Environmental justice: Region 9 will focus enforcement resources in communities which are
  disproportionately impacted by environmental stressors, including the San Joaquin Valley. In
  addition, we are working closely with our states and tribes to ensure the delivery of safe drinking
  water by public water systems, particularly those impacted by the presence of naturally-occurring
  arsenic.
- Tribal lands and Pacific islands: Region 9 will focus enforcement resources on jurisdictions not
  authorized to implement federal programs as is the case in many of our tribal lands and Pacific
  islands. The Region will invest in enforcement activities across Indian country including inspections
  of underground storage tanks, pesticide applications and hazardous waste generation and storage
  facilities. In addition, we will work to close banned large capacity cesspools which threaten Hawaii's
  coastal waters.
- **CAA mobile sources:** We will address air pollution from mobile sources that contributes significantly to sub-standard air quality in the Region, particularly California. We will also support Headquarters in developing an enforcement program to ensure compliance with new fuel standards for ships entering West Coast ports. In addition, we will continue to work with U.S.

<u>Customs and Border Protection</u> to address illegal imports of vehicles, engines, and chemicals at Region 9 ports.

- Pesticides: Our enforcement focus is on worker protection, soil fumigants, and pesticide imports.
   We are also actively engaged in cases of unsubstantiated claims of product efficacy, including hospital grade disinfectants.
- Oil spill prevention: Region 9 has dedicated significant enforcement resources to conduct Spill
  Prevention, Control, and Countermeasure inspections at oil production facilities in southern and
  central California. We will conduct inspections or exercises at facilities that are required to prepare
  Facilities Response Plans. We will also continue to take appropriate enforcement action for illegal
  spills impacting our waters.
- Chemical safety: A significant portion of Region 9's inspection resources are focused on refineries and other facilities that represent a high risk to surrounding communities in the event of an accidental chemical release. We will conduct risk management inspections at 31 chemical facilities with a focus on these facilities.
- State enforcement program oversight: We will conduct effective oversight of delegated state programs to improve enforcement in Region 9. Under the national State Review Framework, Region 9 will review Hawaii's CWA, RCRA and CAA compliance and enforcement programs in FY15, and Nevada's CWA, RCRA and CAA programs in FY16.

# Environmental Justice

EPA is committed to addressing the needs of overburdened communities by decreasing environmental burdens, increasing environmental benefits, and working alongside them to build healthy, sustainable and green communities. EPA's Plan EJ 2014 laid a foundation for integrating environmental justice in all our programs. EJ2020, to be finalized next year, will focus on furthering our progress in environmental justice, collaborating with partners, and demonstrating our progress. EPA also published its FY15 EJ Action Plan, informed by a "Teach-In" held in 2014, which brought together EJ leaders from throughout the Region to share ideas about EJ priorities. EPA will publish a progress report on this plan early next year. Heart disease, cancer, and respiratory illnesses, such as asthma, are three of the top four deadliest health threats in America, and all three are linked to environmental causes including air pollution. All three also have an overwhelming impact on minority and low income communities. We will address these environmental justice issues through the following:

- Use EJ small grants to support environmental problem solving in Region 9 communities.
- Use EJSCREEN in strategic targeting of compliance and enforcement resources.
- Support geographic initiatives in areas with identified environmental justice concerns, such as the San Joaquin Valley.
- Pursue Supplemental Environmental Projects, where appropriate.
- Improve the health of those who work in or around pesticides by reducing the number of people affected by moderate to severe pesticide exposure incidents by funding training for trainers, who will in turn educate farm workers on pesticide safety.

# Geographic Areas of Focus

#### Tribes

The U.S. has a trust responsibility to federally recognized Indian tribes. We work on a government-to-government basis with all 148 tribes in Region 9. Region 9 tribal lands comprise half of all Indian land in the country, and more than 80% of the tribes in the Region have an environmental presence.

Tribal governments in Region 9 range from some of the smallest, without lands reserved in trust and with less than 50 tribal members, to the largest tribe in the country, the Navajo Nation. The Navajo Nation has more than 300,000 residents and the Tribe's environmental program employs more than 60 staff.

Economically disadvantaged populations in Indian country suffer from critical environmental and health problems. Many residents live below the poverty line and in remote areas that lack access to power, drinking water and wastewater infrastructure. On the Navajo Nation, more than 30% of households lack access to safe drinking water.

We will protect the environment in Indian country by focusing on the following priorities:

#### Tribal Environmental Capacity

- Each year, award approximately 130 grants totaling more than \$16 million and provide technical support to tribes and inter-tribal consortia to build and maintain environmental protection programs that protect 27 million acres of land and the health of 450,000 reservation residents
- Advance green building practices in tribal homes through demonstration projects and adoption of greener building codes.

## • Tribal Clean and Safe Water

- Reduce the number of tribal homes that lack access to safe drinking water and basic sanitation by investing a combined \$16.5 million in FY15 and FY16 for tribal water and wastewater infrastructure projects.
- Protect water quality and restore watersheds by providing grants and technical support.
- Building tribal capacity to improve SDWA compliance, through user rate studies, operator training, education and outreach on new rules, and other issues vital to providing safe water.

# Tribal Clean Air

Tribal New Source Review: The Tribal New Source Review Program is the new preconstruction permitting program for tribal areas that do not meet air quality standards. The goal of the pre-construction permitting program is to ensure that new or modified sources of air pollution do not cause or contribute to violations of the national ambient air quality standards by requiring state-of-the-art control technology and to assure that the proposed new construction will not interfere with attainment or maintenance of an air quality standard.

To help streamline the program for minor sources, EPA proposed general permits for 10 source types commonly found on tribal lands, of which five have been finalized and the other five are in the process being finalized. Region 9 staff will be developing the General

Permit for Gasoline Dispensing Stations for California in the coming year. This general permit will contain California's stringent requirements not found elsewhere in the nation.

- Tribal Indoor Air Quality and Health Network: We will continue efforts to establish a Tribal Indoor Air Quality & Health Network to help improve indoor air quality for Region 9 tribes. This project aims to foster partnerships between federal, academic, and nongovernmental partners, and create opportunities for tribal programs to share best practices. We will seek training and funding opportunities, as well as new tools and resources for tribes working on indoor air quality and health challenges.
- Support building tribal capacity to protect air quality, such as training, education and outreach, monitoring, emission inventory development, and rule development.

## • Tribal Solid Waste Management

- Provide technical assistance to tribes, including five waste characterization trainings, to help build solid waste program capacity.
- Support the development and adoption of Tribal Integrated Solid Waste Management Plans to guide long-term planning for safe solid waste management.

#### · Tribal Green Building

Collaborate with tribes to identify and implement green building practices.

#### Tribal Underground Storage Tanks

- Work with federally-credentialed tribal inspectors to inspect underground storage tank facilities on tribal lands.
- Prevent releases from <u>operating underground tanks</u> and close leaking underground storage tanks on tribal lands.

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# Navajo Nation

The Navajo Nation is the largest reservation in the country, with nearly 175,000 people living on more than 17.5 million acres – a land base the size of West Virginia. Nearly forty percent of the residents live below the poverty line, with nearly 50% unemployment. Many live in remote areas that lack access to power, drinking water and wastewater infrastructure. In addition, the legacy of uranium mining continues to affect residents, including impacts from the mines themselves, contaminated landscapes, and homes constructed from contaminated materials. The Nation's environmental program has more than 74 staff, who focus their efforts on protecting the water, air, and land, including four programs delegated by the federal government. EPA has provided over \$93 million for Navajo EPA program development, \$85 million for water infrastructure, and \$50 million for uranium mine work.

EPA is working with responsible parties and managing settlements to begin the cleanup process for 97 mine claims, including the historic EPA legal settlement with Kerr-McGee Corp. and Anadarko Corp. That settlement provides approximately \$1 billion to clean up about 50 abandoned uranium mines, where radioactive waste remains from Cold War-era Kerr-McGee mining operations. The Navajo Nation will receive an additional \$45 million to address radioactive waste at the former Kerr-McGee uranium mill in Shiprock, New Mexico.

EPA will work with the Navajo Nation, Hopi Tribe, and other federal and state agencies to fully implement the multi-agency 2014-2018 Five-Year Plan to address the most urgent risks posed by more than 500 abandoned uranium mines.

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#### · Abandoned Uranium Mines

- Provide grants to fund Navajo Superfund Program, Navajo Abandoned Mine Land program, and Department of Justice to work with EPA to support Navajo Nation participation in implementation of the Five-Year Plan.
- With the Navajo Superfund Program, assess up to 100 additional structures for uranium contamination each year.
- Increase access to safe drinking water in the abandoned uranium mine regions, in partnership with the Indian Health Service and other agencies.
- Conduct detailed assessments at up to 50 of the highest priority mines.
- Complete design of the cleanup of the Northeast Church Rock mine site.

## Hawaii and the Pacific Islands

EPA works closely with the State of Hawaii and the U.S.-affiliated Pacific Islands to protect island residents and sensitive ecosystems. Due to their remote locations and limited land-based resources, the islands face challenges in building and maintaining infrastructure that provides clean and safe water and addresses garbage and hazardous waste. They are also among the first to experience climate change impacts, including rising sea levels and threats to coral reefs.

#### Hawaii

The State of Hawaii, with 1.3 million residents, is one of the most remote archipelagos on the planet. Hawaii imports 90% of its energy and over 85% of its food. Seven million visitors are drawn to Hawaii each year to the beautiful beaches and coastal waters. There are 11 military bases in Hawaii utilizing the islands' resources for training and family housing for over 20,000 personnel. EPA is working to protect public health and the environment by promoting clean energy, protecting waters, and preventing pollution.

## Air Quality and Climate Change

EPA will support the Hawaii Clean Energy Initiative's (HCEI's) goal of achieving 70% clean energy by 2030, which includes renewable energy, energy efficiency and transportation that in turn addresses air quality and climate change issues.

- Hawaii Clean Energy Initiative (HCEI): EPA is working with the Hawaii Department of Transportation on sustainable transportation. In 2016, EPA will help convene Sustainable Transportation Forums, with the goal of reducing fossil fuel use in ground transportation.
- **Bikeshare**: EPA's \$130,000 in seed funding and program facilitation has helped leverage \$2 million to start a bikeshare program in Hawaii. Phase I of bikeshare will focus on urban Honolulu and will launch in 2016. It will provide approximately 200 stations and 2,000 bicycles, reducing "vehicle miles traveled" (VMT) by approximately 4.3 million miles annually.
- Rewarding Internships for Sustainable Employment: EPA is leveraging resources in Hawaii to
  expand the "Rewarding Internships for Sustainable Employment" (RISE) program, a paid internship
  program to train Hawaii's green workforce and implement a variety of sustainability projects. In
  2015, EPA has provided seed funding for the program, leveraging over \$1 million from other
  organizations over the last five years. The RISE program currently has 71 alumni and 14 active
  fellows.

#### Water Quality and Sustainable Infrastructure

EPA will focus on addressing multiple types and sources of land-based pollution to protect and improve coastal water quality and unique environmental assets, such as coral reefs. To protect, enhance and restore Hawaii's coastal waters, EPA will:

- Work with state and county agencies to improve water quality in Lahaina by supporting increased
  water reclamation and minimizing impacts to groundwater and nearby coastal waters from
  injection wells at Maui County's Lahaina Wastewater Reclamation Facility.
- Close large capacity cesspools (LCCs) in priority areas and priority sectors. About 1,400 LCCs remain active out of the 4,700 identified by EPA to date.
- Work with the U.S. Army Corps of Engineers to approve a new Coral Reef Mitigation Program to restore coral reefs.
- Work with key stakeholders in West Maui, South Kohala, and Hanalei Bay watersheds to develop
  watershed management plans. Use federal authorities or funding to address land-based sources of
  pollution.

#### **Cleaning Up Communities and Advancing Sustainable Development**

EPA works closely with communities in Hawaii to facilitate property cleanup and reuse, which can reinvigorate communities, protect natural resources, and prevent sprawl. One such cleanup is at the Pearl Harbor Naval Complex (PHNC), an active military facility encompassing approximately 12,600 acres of land and water. The Harbor's four lochs provide an estuarine environment bordered by wetlands and marsh habitat. To advance cleanup at Pearl Harbor, EPA will:

- Work with the Navy and the Hawaii Department of Health to issue the proposed plan for the PHNC
  Harbor Sediment project, which will identify. The proposed plan identifies areas of the Harbor
  requiring cleanup after based on a multiyear investigation of fish and sediment throughout the four
  lochs. The proposed cleanup will be extensive, involving a combination of focused dredging,
  enhanced natural recovery, activated carbon amendment treatment, and monitored natural
  recovery.
- Continue with investigations and cleanup work at the private ownership sites around Pearl Harbor: Waipahu Landfill and the Oahu Sugar property.

EPA also works with HDOH to oversee cleanups at high priority RCRA hazardous waste sites and leaking underground storage tank sites. To enforce waste regulations and oversee the cleanups, EPA will:

- Partner with HDOH to ensure that final remedies are completed at 25% of RCRA hazardous waste cleanup sites in Hawaii by the end of 2016.
- In FY15, pPartner with HDOH to establish and ensure implementation of an the enforceable
  agreement with the Navy to put in place a comprehensive action plan for the Red Hill underground
  storage tank facility to clean-up past releases and reduce the threat of future releases at the Red Hill
  underground storage tank facility.

To address marine debris, EPA is coordinating with <u>stakeholders to investigate and mitigate</u> contaminant releases from Tern Island and to reduce trash discharged from Hawaii's storm water <u>system the National Oceanic and Atmospheric Administration (NOAA) to reduce sources of marine debris, prevent trash from entering the oceans, and assess the human and ecosystem impacts and potential for <del>cleanup</del>. The Hawaiian archipelago acts as a giant "strainer," collecting marine debris generated throughout the North Pacific region. Much of the debris originates from Pacific Rim countries, ocean vessels, and natural disasters. To reduce the accumulation and impact of trash in the Pacific Gyre, EPA will-</u>

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Commented [CC6]: Note: Red Hill is duplicated on pg 16 and pg 24 (with track changes on) Work with NOAA, the University of Hawaii, and the Oceania Regional Response Team to assess the
potential impacts of the 2011 Japan tsunami-generated debris.

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- Work with HDOH to ensure trash reduction plans are developed and implemented where required by National Pollutant Discharge Elimination System (NPDES) permits.
- Investigate potential sources of industrial plastic pellets and pursue CWA investigation, where appropriate.
- Work in Waianae, Oahu to reduce trash thrown into streams by 10% and increase the use of disposal and recycling facilities by 10%.

## **Chemical Safety and Pollution Prevention**

Pollution prevention strategies are especially important in island environments, where infrastructure is often a constraint. To help prevent pollution from solid and hazardous waste, EPA will:

- Partner with Hawaii colleges, schools, groceries, and for venues restaurants under EPA's Food Recovery Challenge to reduce food waste reaching landfills.
- Support Hawaii Green Business efforts to achieve pollution prevention goals,
- Approve HDOH's "Model Accreditation Plan," through which the state can train and certify asbestos
  abatement professionals.

#### Pacific Islands

The U.S.-affiliated Pacific islands, including the territories of American Samoa, the Commonwealth of the Northern Mariana Islands (CNMI), and Guam, as well as the Freely Associated States of the Marshall Islands, Palau, and the Federated States of Micronesia (FSM), face significant environmental challenges. Each island jurisdiction has its own local environmental agency working to protect public health and the environment. In addition, geo-political changes have heightened the strategic importance of the U.S. Pacific islands, as underscored by the proposed construction of new military facilities in CNMI and Guam.

Each year, EPA awards grants totaling more than \$30 million and provides technical support to the Pacific islands of American Samoa, Commonwealth of the Northern Mariana Islands, and Guam to build environmental protection programs and improve water infrastructure. Our goals are to support environmental agencies in the Pacific Islands, improve safety of drinking water and near-shore water quality, protect coral reefs, reduce environmental impacts, and promote sustainability practices.

## **Environmental Program Capacity**

- Increase technical expertise at each Pacific island environment agency.
- Implement Memorandums of Understanding with Pacific Island colleges and universities to promote partnerships with EPA and environmental career opportunities for students.

## Solid Waste Management

- In Guam, continue to work with the federal court-appointed Receiver to operate the new Layon landfill and close and ultimately delist the Ordot Landfill Superfund Site.
- Collaborate with Guam EPA, DoD and island stakeholders to advance a framework for zero waste management and support efforts to increase Guam's recycling rates.

## Military-Related Impacts

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- Work with DoD, the governments of Guam and CNMI, and other federal agencies to prevent or reduce significant environmental impacts associated with the military buildups in Guam and CNMI. The number of Marines and dependents based in Guam will include 5,000 Marines and 1,300 family members.
- Collaborate with DoD, the government of Guam, and other federal agencies to support water infrastructure needs.

## Water, Wastewater and Power Infrastructure

- Increase the number of people served by community drinking water systems that meet all
  applicable health-based drinking water standards.
- Work with local utilities to rehabilitate and replace aging water and wastewater infrastructure to
  decrease total water loss and sewer system infiltration and increase treatment capacity.
- Ensure compliance with court orders and settlements with Guam Waterworks Authority and Commonwealth Utilities Corporation (CUC) requiring long-term infrastructure upgrades needed to comply with the CWA and the SDWA.
- Oversee the Court appointed Engineering and Environmental Management Company upgrades to CUC's power plant oil storage tanks and pipeline needed to comply with the Oil Pollution Act.

## U.S.-Mexico Border

The U.S.-Mexico Border extends more than 2,000 miles from the Pacific Ocean to the Gulf of Mexico, and the region encompasses 62.5 miles (100 km) on each side of the border. It is home to more than 15 million people, and is characterized by social, economic, and political contrasts. Ninety percent of the population resides in 15 paired, inter-dependent sister cities.

Rapid population growth in the cities has resulted in unplanned development, demand for land and energy, increased traffic and waste generation, insufficient waste disposal facilities, and more frequent chemical emergencies. Many border residents suffer from exposure to airborne dust, pesticide use, and inadequate water supply and wastewater treatment facilities.

The 1983 La Paz Agreement between the U.S. and Mexico serves as the foundation for EPA's binational cooperation with Mexico on border environmental issues. Three binational environmental agreements have been signed and implemented since 1983. The U.S.-Mexico Environmental Program: Border 2020 is the latest and most ambitious agreement thus far. In the U.S., lead responsibility for the Border 2020



program resides primarily within Regions 9 and 6 in San Francisco and Dallas, Texas. Both Regions coordinate their efforts and work jointly with our federal, state and tribal partners in the U.S. and Mexico to address the environmental and public health challenges along the border. The following objectives guide our work:

Multi-Stakeholder Border Plan

- Develop 2-year Action Plans for California/Baja California and Arizona/Sonora to prioritize EPA resources that fulfill unmet Border 2020 goals and objectives.
- In 2015-2017, fund environmental projects totaling more than \$1.2-3\_million in border communities to improve binational air quality, improve water quality watershed pollution in the Tijuana, New River, and Nogales binational watersheds, and improve trash and e-waste management capacity, and improve children's health in border communities.

## Water Quality

- Construct wastewater infrastructure projects and connect homes that previously lacked service.
- Incorporate sustainable technologies and green building practices in water infrastructure projects.
- Invest \$3.9 million in wastewater rehabilitation projects in the Imperial Valley/Mexicaliregion to reduce wastewater discharges into the New River. In FY15, certify 3 projects forconstruction in Mexicali and Tijuana, Baja California, and Willcox, Arizona, and completeprojects in Bisbee, Arizona, and Holtville, California.
- Provide Pomerene, Arizona with a technically and financially feasible drinking water system
  to reduce arsenic and fluoride concentrations in their drinking water below the established
  maximum contaminant level (MCL).

## · Air Quality

- Provide funding and technical support to the California Air Resource Board (CARB) to conduct a two year PM<sub>2.5</sub> monitoring project in Mexicali, Baja, to better understand international transport of pollution.
- Provide funding to the Imperial County Air Pollution Control District (ICAPCD), to organize an outreach campaign in Mexicali to discourage fireworks and open burning during the holiday season in order to reduce PM emissions
- Work closely with ICAPCD and CARB as they complete a PM<sub>2.5</sub> attainment plan and begin development of a PM<sub>10</sub> attainment plan.
- Provide funding to the San Diego Air Pollution Control District to operate a special-use PM<sub>2.5</sub> monitor at the San Diego/Tijuana border crossing.
- Provide funding to the Arizona Department of Environmental Quality to operate a PM<sub>2.5</sub> monitor near Nogales, Sonora.

## Solid Waste

- Mitigate and remove at least 30 tons of binational trash in the Nogales Wash in the Ambos Nogales border of Arizona and SonoraConvene a Sustainable Materials Management forumin the border region to promote strategies and actions that achieve zero waste viasubsequent pilot projects.
- Complete trash removal and mitigation projects in Mexicali to reduce trash from entering the new-New River watershed.
- Collect at least 60,000 lbs of e-waste via four e-waste collection events and by developing ewaste capacity and public awareness on best management practices and by increasing the use of certified recyclers.
- Enroll 12 restaurants and educate 50,000 people in Tijuana on ocean friendly practices, to

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reduce trash and eliminate single-use containers, especially Styrofoam and other plastics.

## · Children's Health

- Convene a Border Children's Health Symposium for medical and healthcare practitioners
  working in the border region to build children's environmental health capacity and ensure
  that environmental health information and emerging studies are reaching doctors and
  public health personnel working with vulnerable populations within the border region.
- Conduct at least one promotor workshop to share environmental health information with at least 100-150 promotores and health outreach workers who can share information with vulnerable populations along the California-Baja California border.
- Assess the state of environmental health in the Arizona border region to better understand the environmental health challenges and opportunities in the Arizona/Sonora border region.

## • Emergency Response

- Facilitate and provide administrative support for quarterly California-Baja California and Arizona-Sonora Task Force meetings, exercises and training.
- Update Binational Hazardous Materials Prevention and Emergency Response Sister City Plans Imperial County-Mexicali, Ambos Nogales Sister City Plan, Yuma/San Luis-San Luis, and Douglas-Agua Prieta Sister City Plan.
- Facilitate trans-boundary movement of equipment and personnel during binational incidents and drills
- Exercise and update the notification system of the Joint Contingency Plan and emergency notification protocol.

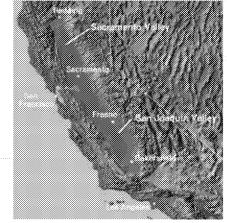
## San Joaquin Valley

The San Joaquin Valley is California's top agricultural producing region, growing more than 250 unique crops and much of the nation's fruits, vegetables, and nuts. California is the nation's leading dairy state, with three-quarters of its dairy cows located in the Valley. The annual gross value of agricultural production in the Valley is more than \$25 billion.

The Valley owes much of its agricultural success to a remarkable water storage and distribution system supported by the federal Central Valley Project, which annually distributes roughly four million acre feet of water from the Bay-Delta and San Joaquin River throughout the Valley. Most of this diverted river water is utilized for agriculture, while Valley communities rely mostly on ground water to drink.

The Valley's extensively managed water systems also support critical wetlands that make the San Joaquin Valley one of the major regions for wintering waterfowl on the Pacific Flyway. The San Joaquin River boasted one of the largest salmon runs on the Pacific Coast before nearly 95% of the river water was diverted for irrigation. Water diversions leave 60 miles of the river to run dry in most years and have left little water for the Valley's remaining wetlands. California's ongoing drought has further exacerbated the competing needs of the Valley.

The Valley's successes have impacted severely the health of more



than four million residents. The San Joaquin Valley's unique topography and wind patterns have contributed to the worst air quality in the country, and the Valley has some of the highest rates of childhood asthma in California. Transportation, especially trucks, is the largest source of air pollution in the Valley. In addition, noncompliance with federal and state drinking water requirements disproportionately affects small, disadvantaged communities in the Valley. A quarter of small community water systems in the San Joaquin Valley violate one or more health based drinking water standards, including arsenic and nitrate, as compared to 10% statewide. Many of these systems do not have the economies of scale that larger systems do, and often need assistance in developing the technical, managerial and financial capacity necessary to address their noncompliance.

In addition, the Valley has some of the highest rates of poverty and unemployment in California. High Speed Rail development, if approved, could bring a significant number of new jobs to the Valley.

The following principles will guide EPA's work in the San Joaquin Valley:

- Environmental Justice: Environmental justice will be considered in regulatory actions that impact
  the Valley. We will ensure that EPA permitting, oversight, clean up, and risk assessment activities
  take into consideration, and are responsive to, vulnerable communities. We will also increase the
  transparency of the work of EPA and its partners.
- Partnerships: We will work with our federal, state, and local partners to better focus our collective
  resources and improve the quality of life in the San Joaquin Valley. We will also convene local and
  private partners to tap their expertise and resources, as well as work closely with tribal
  governments, environmental organizations and community groups to address environmental
  challenges.
- Enforcement: We will coordinate with state and local agencies to enhance inspection and
  enforcement. We will also increase public engagement by helping communities better understand
  federal, state and local roles in environmental rules, permitting, planning, and enforcement.

Over the next two years, EPA will improve public health and the environment by focusing on the following:

- Air: In partnership with the California Air Resources Board (CARB) and the San Joaquin Valley Air
  Pollution Control District (SJVAPCD), reduce PM<sub>2.5</sub> (fine particle matter) through regulatory action.
  Convene government agencies and private companies to accelerate the development and adoption
  of cleaner technology.
- Water: Support efforts to address drinking water issues and restore the fish and wildlife habitat of the San Joaquin River.
  - Work with the State Water Resources Control Board to address significant noncompliance with federal and state drinking water requirements.
  - Work with other federal agencies to leverage funding for public water systems that need infrastructure improvements and treatment to meet drinking water standards.
  - Work with the State Water Resources Control Board, Regional Boards, and other parties to reduce problems associated with nitrate contamination in the Tulare Lake Basin and Salinas Valley.
  - Support stakeholder forums for identifying regional solutions to water and wastewater challenges in rural communities.
- Communities: Support ongoing federal, state, local, and community-driven efforts to invest in

equitable and sustainable development of the San Joaquin Valley.

- Support more livable and vibrant communities that are environmentally and economically
  sustainable by participating in the environmental review processes for various segments of
  the proposed High Speed Rail system reviewing the Final Environmental Impact Statements
  for the San Joaquin Valley portions of High Speed Rail and the station area development
  plans for Fresno and Merced.
- Partner with Greenaction for Health and Environmental Justice to provide educational outreach to Kettleman City and Avenal residents on diesel emissions and health, educate truck and bus drivers about diesel health issues and the laws regarding idling of diesel vehicles, secure agreements from businesses that use diesel vehicles to educate truckers about reducing idling, and develop a bilingual community guide on how to implement a diesel education and emission reduction program.
- Partner with Community Water Center to provide technical and educational assistance tosmall rural communities in Tulare, Kern, Kings and Fresno Counties about drinking waterpollution and facilitate community participation in public processes that can affect drinkingwater accessibility and safety.
- Partner with Californians for Pesticide Reform to build a Web-based real time system to monitor, track, and address environmental health hazards and improve children's health outcomes in Tulare and Kern counties, and provide technical assistance to the South Kern community and the California Endowment to implement action plans that will improve air and water quality, and reduce the risk from pesticides.
- Work with Fresno Youth Council's Brownfield to Urban Garden project to identify a
  potential site for a community garden in Southwest Fresno and to assess the site to ensure
  it is safe for gardening. Afterwards, facilitate a community-based process to design and plan
  the construction of the community garden.
- Support existing assessment or cleanup Brownfield Grants in the San Joaquin Valley, including those that provide training to safely clean up hazardous materials in buildings and in soil, which can lead to jobs in local government, utilities and private firms.
- Agriculture: Reduce the environmental impacts of Valley animal and crop agriculture.
  - Healthy soils have a myriad of properties that are beneficial to the environment and at the same time can help growers endure extreme weather conditions and drought. In the coming year, we will work with our partners and agricultural stakeholders to: 1) communicate the benefits of agricultural practices to improve soil health, including developing a better understanding of the benefits for carbon storage, drought resilience, air and water quality, pollinator health, and reduced pesticide risks, while providing financial benefits to producers; 2) provide incentives and leverage funding for the implementation of soil health practices; 3) address regulatory and other barriers that prevent the implementation of these practices; and 4) measure and record environmental improvements to air and water quality from the implementation of soil health measures.
  - Reduce pesticide risks. Protect workers from improper application of pesticides by overseeing state inspection and enforcement programs. Organize pesticide container recycling projects.
  - Support renewable energy and reduce greenhouse gases by addressing the barriers of dairy digester implementation and helping dairy digesters come on line.
  - o Reduce PM<sub>2.5</sub>, NO<sub>X</sub>, and CO<sub>2</sub> by working with local air quality agencies and industry partners

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to coordinate funding for replacement or retrofit of agricultural engines.

 Communications: Increase transparency, accountability, and support through outreach and communication with the public, media, and decision-makers.

# Making a Visible Difference in Communities

EPA is focused on providing better support to communities, especially in environmentally overburdened, underserved, and economically distressed areas where the needs are greatest. We are coordinating technical assistance and other resources across EPA programs, with States, Tribes, and local governments, and with other federal agencies to support communities as they pursue environmental improvements that enhance economic opportunity and quality of life. While we will continue to work in thousandshundreds of communities, we have identified more than 50 communities in the Pacific Southwest where we will focus action in the next two years. This work will be is informed by a dialogue on the environmental and public health issues that matter most to these communities. Lessons learned through this work will be used to improve the support we provide to all communities in the future.

## American Samoa

In American Samoa, EPA is working with American Samoa through the Making a Visible Difference Initiative—to address environmental challenges, as part of the Making a Visible Difference initiative. The American Samoa government has been ambitious in addressing environmental issues. It was the first U.S. state or territory to implement a plastic bag ban on a jurisdiction-wide basis, and American Samoa EPA built the first LEED Platinum building between Hawaii and Australia. The American Samoa government also has a goal to make its outer Manua Islands 100% fossil-fuel free by 2016, the first islands of their size worldwide to be free of fossil fuels.

EPA will focus additional resources in American Samoa to advance drinking water, climate change, and clean land goals. American Samoa has significant drinking water challenges with ongoing boil water notices impacting the majority of the population. With an almost entirely coastal population, American Samoa is also particularly susceptible to risks associated with climate change and sea level rise American Samoa is also designated a 'coastal zone' under the Coastal Zone Management Act, indicating its at-risk status to climate change impacts.

- Water: Work with ASEPA to eliminate boil water notices by relocating wells and addressing sources of contamination. Support research of new source water and groundwater modeling to inform future well location selections.
- Coral Reefs: Support efforts to restore the health of coral across the territory, including in
  Faga'alu, designated one of the three priority watersheds in the U.S. by the U.S. Coral Reef Task
  Force. Provide technical assistance to American Samoa to identify and implement climate smart
  planning and adaptation to protect coral reefs.
- Climate Change: Provide technical support and tools to hHelp inventory water and wastewater
  assets as well as waste disposal sites and overlay their locations with sea level rise and storm flood
  projections in order to. The inventory will then be used to identify potential adaptation measures
  appropriate for American Samoa as well as assess the system's vulnerabilities and raise awareness
  of climate change impacts.

- Renewable Energy: Identify and provide technical resources to facilitate achieving American
  Samoa's goal of 100% fossil fuel-free Manua Islands by 2016. We will convene federal and
  American Samoa government agencies to eEncourage the adoption of electric vehicles charged by
  renewable energy and deploy electric vehicles and charging stations among federal and American
  Samoa government agencies.
- Solid Waste: Leverage an EPA-funded RARE project to identify sustainable solid waste
  alternatives for remote islands and develop a pilot plan that can inform policy and regulatory
  changes to keep land safe from waste contamination.

## Gila River Indian Community

As part of EPA's Making a Visible Difference in Communities, wWe are directing additional resources to advance Gila River Indian Community's (GRIC) sustainability goals related to buildings and housing, energy, cleaner transportation, and sustainable materials management. Located near Phoenix, Arizona, the tribe's land base of 372,000 acres is substantial. Land uses include government offices, economic development (hotels, casinos, industrial park, agriculture), and open space. As Phoenix continues to expand, we expect GRIC to face increasing pressures on development, housing, and transportation. EPA will:

- Provide technical assistance to develop and adopt green building codes with an emphasis on water and energy efficiency, and rooftop solar applications.
- Fund assessments or audits of current recycling and diversion rates through a waste stream
  analysis to identify opportunities to increase recycling rates, identify potential new recycling
  streams on the Reservation, and assess the feasibility of small scale composting.
- Conduct a workshop on the Reservation that targets air emissions from mobile and stationary
  industry sectors to educate participants about the threats to human health caused by diesel
  particulates. The workshop will also outline strategies for reducing diesel emissions within fleets
  and equipment.
- Support collection and proper disposal of obsolete and waste pesticides with a collection event for growers and other users of pesticides.

## Gilroy

As part of EPA's Making a Visible Difference in Communities, In Gilroy, we are directing additional resources to Gilroy to help the community maximize the benefits of the California high speed rail investment and reduce the project's impacts. The State of California has begun construction of an 800-mile statewide high-speed rail (HSR) system to connect San Francisco, Los Angeles, and other major metropolitan areas. Once completed, the HSR system has the potential to transform future growth patterns in California. Specifically, local and regional land use and transportation decisions near future-HSR station areas will alter the environmental sustainability and economic resiliency of communities for generations to come. EPA has tools and expertise to assist communities with this work.

Gilroy is anticipated to have one of the 24 HSR stations. Located south of San Francisco, Gilroy has a population of just under 50,000 that is nearly 60% Hispanic. Proximity to major urban centers via HSR could induce significant growth in Gilroy, and regional connectivity to the HSR station will be a challenge. The form and location of growth has tremendous implications for air quality, water resources, climate, and the health and economic well-being of current and future residents. Strong station area planning in-Gilroy could serve as an example for other California HSR station cities. For Gilroy to fully benefit from

HSR while avoiding adverse impacts, such as unsustainable growth patterns and lack of transit-connectivity, complementary investments are needed in the community. Therefore, EPA is supporting work to:

- Help identify and address gaps in ongoing station area planning work, such as assessing infill
  potential, economic development, or safe routes for walking and biking.
- Assist Gilroy in integrating equity into planning by ensuring that disadvantaged residents are
  positioned to benefit from HSR, potentially through improved community engagement, and
  inclusion of affordable housing within station area development, and other high priority needs
  identified by impacted residents.
- Help Gilroy address disturbed sites brownfields near the proposed HSR station, including
  identifying preferred reuse opportunities, with input from impacted residents. Currently these
  sites are an existing environmental burden and could hinder infill development.
- Promote environmentally responsible planning for development and multi-modal transportation
  connectivity. Provide technical assistance and decision support and planning tools for Gilroy to use
  in their decision making. Ensure that Gilroy has access to information on the long-term impacts of
  transportation and land use decisions (fiscal health, environment, human health, etc.).

## Imperial Valley

Within the US-Mexico Border region, EPA is working with Imperial County, California, a as part of Making a Visible Difference in Communities. This predominantly Hispanic county (over 80 percent) that has one of the highest unemployment rates in the nation (27.2 percent21%). Compared to the rest of the state, Imperial County's children are three times more likely to be hospitalized for asthma, and have the highest obesity rate (47%). The County is also among the top five counties for non-attainment for PM<sub>2.5</sub>, and the highest poverty rate in the state, just behind counties in the San Joaquin Valley (22.8 percent). Compared to the rest of the State, imperial County's children are three times more likely to be hospitalized for asthma, have the highest obesity rate (38.6 percent), and have the second highest diabetes rate (10.9 percent).

EPA efforts to improve environmental and public health outcomes in Imperial Valley rely on strong, long-term relationships with a variety of collaborators, such as academic partners, community groups, and state agencies. Through these partnerships, EPA is supporting work to:

- Reduce the childhood asthma burden by supporting local organizations working on asthma. EPA
  and partners will provide home assessments and education to low-income families, Healthy
  Homes and asthma-related training to community health workers, asthma information sessions
  for childcare centers, and *Indoor Air Quality Tools for Schools* training, and an environmental
  asthma training for medical providers.
- Advance the Imperial County Community Air Monitoring Study's community air monitoring and citizen science efforts that measure neighborhood-level PM pollution by providing equipment and technical assistance.
- Facilitate innovative problem solving that increases collaboration between regulators and the community.
- Provide Environmental Justice contractor support to enhance the IVAN crowd-based tool to identify environmental issues.
- Increase community knowledge and understanding of environmental health issues for example,

EPA staff has trained community health workers on preventing occupational and in-home pesticide exposure.

 Support collection and proper disposal of obsolete and waste pesticides with a collection event for growers and other users of pesticides.

## Southern Nevada, Las Vegas

The Las Vegas area was among the nation's fastest growing regions in the last 20 years. Growth was mostly uncoordinated and land use patterns became disjointed, creating longer commutes, greater impacts on the environment, and financial burdens on jurisdictions serving new communities well outside town and city centers. Through the "Southern Nevada Strong" collaborative of 13 cities, county, and agencies, the region received a \$3.5M HUD Sustainable Communities Regional Planning grant in 2011 and is now seeking to implement its vision for a more sustainable southern Nevada in several transportation corridors. The region's Metropolitan Planning Organization (MPO) has agreed to take the lead on regional planning once the HUD grant sunsets in 2015 and needs to build capacity in order to do so. EPA will support the region in maintaining momentum gained from the collaborative and help develop technical capacity to implement transit oriented development on a demonstration site. We will:

- Collaborate with Department of Transportation to provide a transit oriented development peer exchange for the MPO and local governments.
- Build capacity of MPO, local governments, developers, lenders, and other private stakeholders through EPA's Building Blocks Program to implement transit oriented development
- Provide design assistance for a Las Vegas Green and Complete Street project. EPA will fund a
  contractor team to conduct a preliminary site analysis and visit the Las Vegas area for a design
  charrette to produce schematic complete street design options for a Las Vegas corridor.
- Convene reuse, recycling, and organics experts to assess existing Las Vegas area reuse, food
  donation, recycling, and anaerobic collection and processing facilities. The EPA-funded convening
  will work to prevent avoidable wasted food, shift excess food to feed those in need, reduce organic
  waste and greenhouse gas emissions in Southern Nevada, and raise awareness of needed
  infrastructure.

# Region 9 Support Services

The Environmental Management Division provides business and support services, which include financial management, field sampling and laboratory analyses, information systems support, facilities management, health and safety programs, human resources management, and ongoing process improvement. Striving for outstanding support of all Region 9 customers, the division has three focus areas: Region 9's support services are key to achieving its mission to protect public health and the environment. Region 9's support programs govern budget, financial and grants management, science, information technology, health and safety, facilities, human resources and strategic planning for the Region.

## Financial Management

Each year Region 9 manages approximately \$1.8 billion in operating and technical assistance resources

and over \$3.2 billion in grants to states, tribes, and local agencies and nonprofit organizations. Over the next two years, we will continue to effectively manage these financial resources.

## · Exercise sound stewardship of financial resources

- Manage 900 active assistance agreements to over 375 unique recipients to ensure effective use of Federal funds;
- Award major contracts competitively to support Region 9's programs and administrative functions:
- Build relationships with small businesses to increase access to Federal procurement opportunities;
- Strengthen Tribal recipients financial management capabilities through training.
  - Manage approximately 900 active assistance agreements to 375 different recipients to ensure proper use of federal dollars.
- Implement the national Recovery Act Stewardship Plan to ensure expenditures of Recovery Act dollars meet the highest fiduciary standards.
- Award major contracts through the competitive process to support Region 9 programmatic and administrative functions, such as Superfund, hazardous waste and emergency response cleanups, and IT support.
- Foster relationships with small businesses for federal procurement opportunities.

## Streamline grants processes

 Support national efforts to promote 'green' grant conditions that emphasize paper reduction and use of environmentally preferable products and services.

# Science

The Regional laboratory is located in Richmond, California, and provides a full spectrum of chemical and biological testing to support regulatory monitoring and environmental decision-making.

- Ensure the availability of high quality environmental data and support emerging science needs
  - Perform 12,000 analyses annually and provide related quality assurance plan reviews, data validation, and field assistance to support regional programs.
  - Support the national ambient air lead monitoring evaluation program, the U.S.-Mexico Border air monitoring program, and tribal governments.

## Support emerging science needs

- Build partnerships with states, communities and academic institutions around common science priorities and interests.
- Work with the National Tribal Science Council, the Regional Science Tribal Science Council, and tribal programs to promote science and science innovation.
- Develop the capability to analyze soil, water, and wipe samples for five chemical warfareagents identified as priorities by the Department of Homeland Security.

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# **Continuous Improvement**

Region 9 is developing the capability to support efficient and effective business practices.

- Build internal capability of Lean Six Sigma experts to evaluate and deliver continuous improvement in our business operations.
- O Train the Regional workforce in Lean Six Sigma.
- Bring more efficient outcomes to human and financial resources management, track improvements and measure savings.

# Abbreviations and Acronyms

BACT - Best Available Control Technology

CAA - Clean Air Act

CalEPA - California Environmental Protection Agency

CARB - California Air Resources Board

CARE - Community Action for a Renewed Environment

CBE - Communities for a Better Environment

CEC - California Energy Commission

CERCLA - Comprehensive Environmental Response, Compensation and Liability Act (Superfund)

CMCC - Civilian Military Coordination Counsel (Charter)

CNMI - Commonwealth of the Northern Mariana Islands

CWA - Clean Water Act

CWSRF - Clean Water State Revolving Fund

DDT - dichlorodiphenyltrichloroethane (insecticide)

DHHS - Department of Health and Human Services

DOD - Department of Defense

DOE - Department of Energy

DOI - Department of Interior

DOJ - Department of Justice

DOT - Department of Transportation

DTSC - Department of Toxic Substances Control (California) DWSRF - Drinking Water State Revolving Fund

EMG - Emergency Management Guide EBMUD - East Bay Municipal Utility District EE - Energy Efficiency

EJ - Environmental Justice

EPCRA - Emergency Planning and Community Right-to-Know Act

EPEAT - Electronic Product Environmental Assessment Tool

FERC - Federal Energy Regulatory Commission

FGC - Federal Green Challenge

FIFRA - Federal Insecticide, Fungicide and Rodenticide Act

FSM - Federated States of Micronesia

FY - Fiscal Year

GAP - General Assistance Program

GHG - Greenhouse Gas

GWA - Guam Water Authority

**HUD** – Department of Housing and Urban Development

IHS – Indian Health Service

LCC - Large Capacity Cesspool

LID - Low Impact Development

LEED - Leadership in Energy & Environmental Design

MACT - Maximum Achievable Control Technology

MS4 - Municipal Separate Storm Sewer System

NEPA - National Environmental Policy Act

NGO - Non-governmental organization

NNDWR - Navajo Nation Department of Water Resources

NNEPA - Navajo Nation EPA

NOAA - National Oceanic & Atmospheric Administration

NRCS - National Resources Conservation Service

NREL - National Renewable Energy Laboratory

PCB - Polychlorinated Biphenyls

 $PM_{2.5}$  – Fine Particulate Matter (less than 2.5 micrometers diameter)

PM<sub>10</sub> - Coarse Particulate Matter (less than 10 micrometers diameter)

PUC - Public Utilities Commission (California)

PWS - Public Water System

RCRA - Resource, Conservation and Recovery Act

RE - Renewable Energy

RMP - Risk Management Plan

SDWA - Safe Drinking Water Act

SCAQMD - South Coast Air Quality Management District

SPCC - Spill Prevention, Control and Countermeasure

SRF - State Revolving Fund

TAG - Technical Assistance Grant

TASC – Technical Assistance Services for Communities (grants)

TBA - Targeted Brownfields Assessment

TMDL - Total Maximum Daily Load

TRI – Toxic Release Inventory

TSCA - Toxic Substances Control Act

UIC - Underground Injection Control

USDA - United States Department of Agriculture

VMT - Vehicle Miles Traveled